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| 09/013,490   | 01/26/1998  | ALEXANDER S. TUZHILIN | 033053 - 475936-00049 | 3399             |
| 30873 7590 12/01/2009<br>DORSEY & WHITNEY LLP<br>INTELLECTUAL PROPERTY DEPARTMENT<br>250 PARK AVENUE<br>NEW YORK, NY 10177 |             |                       |                       |                  |
| EXAMINER<br>WINDER, PATRICE L  |             |                       |                       |                  |
| ART UNIT   |             | PAPER NUMBER          |                       |                  |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

09/013,490

**Applicant(s)**

TUZHILIN ET AL.

**Examiner**

Patrice Winder

**Art Unit**

2445

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 August 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 89-107 and 136-154 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 89-107, 136-154 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/c2)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

1. The affidavit filed on August 31, 2009 under 37 CFR 1.131 is sufficient to overcome the Sklar reference.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 89-99, 102-104, 106, 136-145, 148-150, 152, 154 are rejected under 35 U.S.C. 102(b) as being anticipated by A Lingnau et al., An HTTP based infrastructure for mobile agents (hereafter referred to as Lingnau).
4. Regarding claim 89, Lingnau taught a computer accessible medium including a plurality of executable instructions which, when executed on a first hardware processing arrangement, configure the first hardware processing arrangement to perform procedures (What is an agent?, page 2) comprising:  
  
transmitting, over a network, first executable instructions from the first hardware processing arrangement to a second processing arrangement, and second executable

instructions from the first processing arrangement to a third hardware processing arrangement (Figure 1);

causing an execution of the first executable instructions by the second processing arrangement and the second executable instructions by the third processing arrangement, wherein the execution of (i) the first executable instructions cause the second processing arrangement to perform at least one first operation which is at least one of a first monitoring operation or a first search operation on or in the second processing arrangement (An architecture model, page 3), and

(ii) the second executable instructions cause the third processing arrangement to perform at least one second operation which is at least one of a second monitoring operation or second operation on or in the third processing arrangement (Encapsulation of Agents as MIME Contents, page 7).

5. Regarding claim 136, Shklar taught a system for performing at least one of a monitoring operation or a search operation by performing procedures comprising:

a first processing arrangement which is configured to (i) receive first executable instructions from a particular processing arrangement via a network (Figure 1), (ii) execute at least one of the first executable instructions to performs at least one first operation which is at least one of a first monitoring operation or a first search operation on or in the first processing arrangement (An architecture model, page 3); and

a second processing arrangement which is associated with and separate from the first processing arrangement, the second processing arrangement being configured to (i) receive second executable instructions from the particular processing arrangement

via the network (Figure 1), and (ii) execute at least one of the second executable instructions to performs at least one second operation which is at least one of a second monitoring operation or a second search operation on or in the second processing arrangement (An architecture model, page 3).

6. Regarding claim 154, Lingnau taught a computer system to perform at least one of monitoring operations or search operations on a network accessible information, comprising:

at least one computer accessible medium including thereon at least one module, wherein, when a processing arrangement executes the at least one module, the processing arrangement is configured to:

(i) transmit first executable instructions from at least one first site provided on a network to at least one second site provided on the network, second executable instructions from the at least one first site provided on a network to at least one third site provided on the network (Figure 1),

(ii) cause an execution of at least one of the first executable instructions on the at least one second site to perform at least one operation which is at least one of the monitoring operations or the search operations on or in the at least one second site on the network (An architecture model, page 3), and

(iii) cause an execution of at least one of the second executable instructions on the at least one third site to perform at least one operation which is at least one of the monitoring operations or the search operations on or in the at least one third site on the network (An architecture model, page 3).

7. Regarding dependent claim 90, Lingnau taught the second and third hardware processing arrangements are provided within a network and receives the executable instructions from the first hardware processing arrangement via the network (Figure 1). Regarding dependent claim 138, Lingnau taught the particular processing arrangement is provided within a network and transmits the executable instructions to the first and second processing arrangements via the network (Figure 1).
8. Regarding dependent claims 91, Lingnau taught the second and third hardware processing arrangements provides at least one portion of results of the at least one operation from the second hardware processing arrangement to the first hardware processing arrangement via the network (An Architecture Model, page 3). Regarding dependent claim 137, Lingnau taught at least one of the first processing arrangement or the second processing arrangement is configured to provide at least a portion of results of at least one of the respective first or second operations to the particular processing arrangement (An Architecture Model, page 3).
9. Regarding dependent claims 92, 139, Lingnau taught the second and third hardware processing arrangements each transmits at least a portion of respective results of the respective first or second monitoring operations over the network to at least one further hardware processing arrangement (status, Agent Transport via HTTP, page 8).
10. Regarding dependent claims 93, 140, Lingnau taught the second and third hardware processing arrangements each transmits at least a portion of respective results of the respective first or second monitoring operations over the network to the

first hardware processing arrangement provided on the network (Agent Transport via HTTP, page 8).

11. Regarding dependent claims 94, Lingnau taught the network includes the Internet and a plurality of websites associated therewith (Figure 1).

12. Regarding dependent claims 95, 141, Lingnau taught the first, second and third hardware processing arrangements are external to a network (Figure 1).

13. Regarding dependent claims 96, 142, Lingnau taught the first and second operations are performed based on at least one predetermined criterion (Agent Transport via HTTP, page 8).

14. Regarding dependent claims 97, 143, Lingnau taught the first and second operations includes at least one temporal condition (temporary URL, Agent Transport via HTTP, page 8).

15. Regarding dependent claims 98, 144, taught the second processing arrangement executes the first executable instructions to perform the first operation on the network to which second and third processing arrangements are connected (Runtime Support, page 6); and

wherein the at least one predetermined criterion that includes the at least one temporal condition relates to a change in a content of information of at least one node residing on the network, the change in the content being between a plurality of points in time (updates of information space, Agent Communications via HTTP, page 9).

16. Regarding dependent claims 99, 145, Lingnau taught the change in the content is a change in the content of one or more web pages of at least one website provided on the network (Agent Communications via HTTP, page 9).

17. Regarding dependent claims 102, 148, taught each of the first and second executable instructions contain one or more executable modules which, when executed by respective second and third hardware processing arrangements, configure the respective second and third hardware processing arrangements to perform respective first or second operations (An Architecture Model, page 3).

18. Regarding dependent claims 103, 149, Lingnau taught the execution of the first and second executable instructions generates at least one agent running on each of the second hardware processing arrangement and the third hardware processing arrangements (An Architecture Model, page 3).

19. Regarding dependent claims 104, 150, Lingnau taught the execution of the first and second executable instructions performs a further operation which performs the at least one operation on at least one further hardware processing arrangement (new location, Agent Transport via HTTP, page 8).

20. Regarding dependent claims 106, 152, Lingnau taught the predetermined criteria is included, at least in part, as to be transmitted by the first processing arrangement to the second and third processing arrangements over the network (agent attributes, Agent Transport via HTTP, page 8).



21. Claims 100-101, 105, 146, 147 and 151 rejected under 35 U.S.C. 103(a) as being unpatentable over Lingnau in view of Noble et al., USPN 5,978,842 (hereafter referred to as Noble).

22. Regarding dependent claims 100, 146, Lingnau does not specifically teach the temporal condition is associated with a collection. However, Noble taught the at least one predetermined criterion that includes that the at least one temporal condition is associated with a collection (column 7, lines 21-23) and a storage of first information at a first point in time and a comparison of the first information with a second information obtained at one or more second points in time (column 7, lines 21-25, 39-46). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Noble's collection in Lingnau's mobile agents would have improved efficiency. The indexing would have been more complete and detailed by including Noble's collection.

23. Regarding dependent claims 101, 147, Lingnau does not specifically teach the at least one predetermined criterion includes an indication of at least one relationship between content of a plurality of sites. However, Noble taught the at least one predetermined criterion includes an indication of at least one relationship between content of a plurality of sites on a network to which the second and third processing arrangements are connected (column 13, lines 36-41). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Noble's relationships of content in Lingnau's system for sending agents would have

improved the indexing. The motivation would have been to find additional and modified documents as quickly as possible.

24. Regarding dependent claims 105, 151, Lingnau does not specifically teach the at least one operation monitors for at least one of: (a) appearance or disappearance of one or more links, (b) appearance or disappearance of one or more keywords on a page. However, Noble taught the at least one operation monitors for at least one of: (a) appearance or disappearance of one or more links, (b) appearance or disappearance of one or more keywords on a page (column 5, lines 15-20; column 13, lines 26-30). It would have been obvious to one of ordinary skill in the art at the time the invention was made that incorporating Noble's monitoring appearance and disappearance in Lingnau's system for sending agents would have improved the indexing. The motivation would have been to make sure the indexing is current.

***Allowable Subject Matter***

25. Claims 107 and 153 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

26. The following is a statement of reasons for the indication of allowable subject matter: the closest prior art of record (Chow et al.) fails to teach or suggest retransmitting executable instructions from the first processing arrangement to the respective second and third processing arrangements when the respective first and

second operations terminate prior to a completion of tasks associated with the respective first and second operations.

### ***Conclusion***

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrice Winder whose telephone number is 571-272-3935. The examiner can normally be reached on Monday-Friday, 10:30 am-7:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on 571-272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Patrice Winder/  
Primary Examiner, Art Unit 2445

November 23, 2009